

Nursing Leadership in 21st Century Communities

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Springing Up with Quality Practices in
School and Community Nursing
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Objectives

- Relate childhood health of today and national-level social and economic success of tomorrow.
- Describe the contributions of school and community nurses toward impacting life course outcomes for children.
- Identify three areas for nursing interventions at the community- or population-based level, impacting measurable outcomes for children.

Money Talks: Using predictive models to examine costs of future health burdens

- What does poor health cost business?
- Rising rates of chronic conditions, medical costs of family, and costs of absenteeism and presenteeism (worker present but at a suboptimal level of productivity) affect the bottom line!
- Historically, cost predictions were based on retrospective vital statistics data applied to the current generation/birth cohort living in the current period and environment.
- Later, predicted costs based on: observed patterns of disease clustering, disease progression rates, scores based on propensity to make lifestyle or behavioral changes, and clinical intervention appropriateness scores (Lord/Humana).

Predictive models to examine future health burdens

- Observed Limitations of predictive models:
 - Applying retrospective disease and death rates to current day populations is not a good fit.
 - Also, assumptions about pre-adult life experiences no longer fit. These are rapidly changing for each birth cohort.
 - These models now are known to not take into account risk factors accumulated by people that lead to earlier onset and a longer course of medical care in the lifetime.

Predictive models to examine future health burdens –obesity example (Reither)

- Born 1926 – 1935
 - 20% obesity threshold age 50 – 59
- Born 1936 – 1945
 - 20% obesity threshold age 40 – 49
- Born 1946 – 1965
 - 20% obesity threshold age 30 – 39
- Born after 1965
 - 20% obesity threshold age 20 – 29

Predictive Models – an Updated Perspective

- Population models now need to take into account age and birth cohort-specific exposures and experiences.
- Example: the **degree** and **duration** of obesity has earlier onset and as a result subsequent negative health outcomes are **accelerated**.
- **Such models strengthen the sound economic rationale for supporting health producing trends in children today (Reither).**

Rethinking our approach to health care systems

- **Health is an important determinant of economic productivity across the lifespan.**
- Measured as Cost... or Investment?
 - Strategic planning: will we pay for end of life care, or pay for living well? With investment we aim for future savings and benefits.
- Which is more cost effective?
 - Pay for care after the onset of disease
 - Detect disease early and pay to avoid complications
 - Invest in reducing the probability of disease onset
- **Our children are the message we send to the future we will not see: a signal of the deterioration of our social capital?**

How Community-based Nursing Practice Helps Save the World

- As nurses working with children and families, we alter our course: from medical care to **health development**.
- With life course development approaches in mind, we demonstrate that child health issues go well beyond the medical model of an individual doctor treating an individual child.

How Community-based Nursing Practice Helps Save the World

- We shift more focus to the early part of the lifespan
 - *when long-term health programming is most intense and higher levels of developmental plasticity enable interventions to exact greater returns on resources invested. (Halfon and Hochstein)*
- We promote the well-being of the young
 - *both because of its intrinsic value and because doing so will improve the health of the entire population as people age into adulthood and their reproductive years. (Forrest and Riley)*
 - *Using family-centered approaches*

How Community-based Nursing Practice Helps Save the World

- We recognize and speak to the intensity and significance of risk in early life
 - *as many as half of all children are exposed to unhealthy environments – physical and social – and experience aspects of poor health that have the potential to evolve into full pathology over the life course (Forrest and Riley).*
- We engage in improving community infrastructure and social conditions
 - *With the goal of reducing the accumulated stress burden (known as the allostatic load) over the life course, particularly of girls and women (Lu and Halfon).*

Where do we achieve life course impacts?

- Medication compliance for chronic and acute conditions (Bauchner)
- Self-management education
- Early identification of complications
- Reduce hospitalizations and ER visits
- Reduce absenteeism
- Contribute to high school graduation

Three areas of significant impact for nurses

Reduce adverse events
in childhood
and toxic stress

Shonkoff, J. et al. The Lifelong Effects of Early Childhood Adversity and Toxic Stress. Pediatrics 129:1 (e232 – 426. Retrieved 4 20 2012 at: <http://pediatrics.aappublications.org/content/early/2011/12/21/peds.2011-2663>
http://www.samhsa.gov/children/SAMHSA_Short_Report_2011.pdf

Three areas of significant impact for nurses



Better Health for Better Reproduction

[2Obesity and diabetes in mothers and their children: can we stop the intergenerational cycle?](#)

Herring SJ, Oken E.
Curr Diab Rep. 2011 Feb;11(1):20-7. Review.
PMID: 20963519 [PubMed - indexed for MEDLINE] [Free PMC Article](#)

Three areas of significant impact for nurses




Reduce High School Drop Out; Improve Outcomes for Students with ADHD

Breslau J. (2010) Health in childhood and adolescence and high school dropout. California Dropout Research Project #17. University of California Santa Barbara. Available: http://cdrp.ucsb.edu/dropouts/pubs_reports.htm.
Freudenberg N, Ruglis J. Reframing school dropout as a public health issue. Prev Chronic Dis 2007;4(4). http://www.cdc.gov/pcd/issues/2007/oct/07_0063.htm. Accessed 4/03/2012.

Nurses saving the world, one child at a time



- Lending a voice to children's lives and needs.
- Joining partnerships and coalitions.
- Giving voice to the science and evidence that compels us to improve the lives of children.
- Gathering, analyzing, and reporting *accurate, valid* data to inform needs, priorities, and progress.
- Promoting healthy choices.
- When you help a child.



*[S] "He who helps a child
helps humanity with a distinctness, an
immediateness, which no other help in
any other stage of human life can
possibly give."*

Philips Brooks

Taken from *Conserving the Health of Colorado's Children: A Handbook for Teachers*, produced jointly by the Dept. of Education and the Dept. of Public Health, 1944.

THANK YOU



- Please complete and turn in your evaluations!
- We welcome your comments and suggestions for future events!

Resources



- Bauchner, Howard. The New, New Morbidities: An Emerging Role for School Health and Medication Management at School. In Medication Management in Schools: A System Approach to Reducing Risk and Strengthening Quality in School Medication Management. October 2004. Accessed 4/3/2012: <http://www.healthinschools.org/Health-in-Schools/Health-Services/School-Health-Services/School-Health-Issues/Medication-Management.aspx>
- Forrest C and A Riley. Childhood origins of adult health: a basis for life-course health policy. Health Affairs 2004; 23 (5): 155 – 164.
- Halfon, N and M. Hochstein. Life course health development: an integrated framework for developing health, policy, and research. The Milbank Quarterly 2002; 80(3):433 – 479.
- Lord, J. A dose of insight: using new predictive models, insurers can identify members most likely to have health problems and the best ways to help keep them healthy. Dec. 1, 2005. Best's Review. Accessed: 4/03/2012: <http://www.thefreelibrary.com/. /print/PrintArticle.aspx?id=139601715>

Resources



- Lu M and N Halfon. Racial and ethnic disparities in birth outcomes: a life-course perspective. *Maternal and Child Health Journal* 2003; 7 (1): 13 – 30
- Reither, E. et al. New forecasting methodology indicates more disease and earlier mortality ahead for today's younger Americans. *Health Affairs* 2011; 30(8).
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